

The Impact of Digital Work on Work-Life Balance Among Lecturers in Private Higher Education Institutions in the Klang Valley: A Technology Affordance Perspective

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Abstract: The digital revolution has reshaped higher education, particularly in Malaysia, where work-life balance ranks among the lowest globally. The transformation to digital work has greatly affected both the professional and personal lives of lecturers, raising questions about its broader impact. This study set out to examine how digital work influences work-life balance based on the technology affordances theory and determine whether user experience moderates this relationship. The study, which utilised IBM SPSS, analysed the relationship among five technology affordances (communication, coordination, knowledge sharing, decision-making, and access to resources) and work-life balance, with user experience tested as a potential moderating variable. The results showed that lecturers generally had positive attitudes towards technology affordances, with coordination receiving the highest ratings, followed by decision-making and access to resources. The correlation analysis revealed statistically significant and moderately positive relationships between work-life balance and all five affordances. The regression analysis identified access to resources as the strongest determinant of work-life balance, while coordination and knowledge sharing also had meaningful positive effects. However, communication and decision-making tools made only minimal or statistically insignificant contributions. User experience was not found to moderate the relationship between technology affordances and work-life balance. Overall, this study highlights which technology factors matter most for supporting work-life balance in higher education. It also provides practical recommendations for institutions seeking to improve their digital work environments. The findings emphasise the importance of resource accessibility, user-friendly tool design, and the need for continuous training and a supportive organisational culture.

Keywords: *Digital work, Technology affordance, Coordination, Communication, Knowledge sharing, Decision-making, Access to resources, Work-life balance.*

1. Introduction and Background

The fast pace of digital technologies has significantly transformed the way organisations think about and carry out their work processes (Duan et al., 2022). Current innovative tools such as intelligent systems, large-scale data, connected devices, the Internet of Things (IoT), and other digital platforms, such as Webex and Microsoft Teams, have made off-site and flexible working more possible. This shift has become more important during the COVID-19 pandemic when businesses and educational institutions had little choice but to adopt remote work models to maintain their ongoing business operations (Nagel, 2020). In education, especially, the adoption of digital technologies marked a turning point, whereby virtual teaching and learning became the new norm, which offers new opportunities for student engagement and accessibility (Palumbo et al., 2021; Menon & Suresh, 2022). However, while these technological advancements improved flexibility and efficiency, they also introduced new emerging challenges, especially when it comes to sustaining a realistic balance between professional and private life (Panda & Sahoo, 2021).

A healthy balance between work and personal life is important for psychological health as it promotes career fulfilment and personal harmony (Aruldos et al., 2021; Selim et al., 2024). However, the adoption of digital work removes the boundaries between professional and personal domains, which can consequently lead to work-life conflicts and increased stress related to work. A study found that employees have become more subject to the pressure of continuous connectivity, emotional labour, and constant availability, which contribute to technostress and the phenomenon called "Zoom fatigue" (Duan et al., 2022). In higher education, lecturers have become highly impacted as the shift towards digitalisation has imposed greater responsibilities on them. This compels them to make use of online teaching tools while simultaneously juggling administrative and academic

responsibilities. Although digital tools have been widely adopted in Malaysia, little research has examined how these changes affect lecturers' work-life balance in non-public universities and colleges, especially from a technology affordance perspective (Ramachandaran et al., 2024).

Technology affordance theory provides valuable insights to understand this issue, suggesting that the features of digital tools shape user interactions and the outcomes that they experience (Zhao and Wagner, 2023). These affordances, such as information, interaction, and navigation, play a central role in shaping activities like communication, decision-making, and the sharing of knowledge (Shao et al., 2020). While digital tools offer a number of affordances that can enhance professional efficiency, they can potentially eliminate the distinction between professional and personal life, which raises questions about their implications on the well-being of workers (Bobsin et al., 2018). Thus, this study applied the technology affordance framework to explore how digital work impacts work-life balance among lecturers in private universities and colleges within the Klang Valley.

Malaysia has been ranked among the lowest by global standards and the growth of digitalisation has further added pressure on personal time (Drzewinski, 2023). In education, online work has amplified workload expectations for lecturers who need to simultaneously navigate online teaching, student engagement, and administrative duties remotely (Wong et al., 2023). Many educators report challenges in keeping their personal and professional lives apart, which eventually leads to heightened stress and reduced job satisfaction. Even with the increasing number of studies on work-life balance within Malaysian higher education institutions, most studies only focus on public institutions and offer limited insights into private institutions, especially in relation to the role of digital technologies (Husin et al., 2018; Lee, 2018).

This study aims to address the aforementioned gaps by evaluating how digital work affects work-life balance through the utilisation of technology affordance theory. It focuses on five key affordances (coordination, communication, decision-making, knowledge sharing, and resource access) to determine their influence on lecturers' work-life dynamics. Furthermore, it explores the moderating role of user experience in shaping these relationships. By addressing these aspects, this study seeks to contribute to developing strategic policies and institutional standards that foster a healthier work-life balance in the digital era, ensuring that the integration of technology enhances productivity without compromising employee well-being.

Research Questions

- What is the perceived implication of technology affordance for coordination on work-life balance?
- What is the perceived implication of technology affordance for communication on work-life balance?
- What is the perceived implication of technology affordance for knowledge sharing on work-life balance?
- What is the perceived implication of technology affordance for decision-making on work-life balance?
- What is the perceived implication of technology affordance for access to resources on work-life balance?
- How does user experience moderate the relationships between the five technology affordances and work-life balance?

Research Objectives

- To examine the perceived influence of technology affordances on the work-life balance of employees engaged in digital work within the private higher education sector.
- To investigate how technology affordances relate to work-life balance in digital work settings, with user experience functioning as a moderating variable.

2. Literature Review

Work-life balance (WLB) reflects a person's capacity to ensure a healthy balance between work duties, family obligations, and private life, in a way that fosters overall well-being (Aruldos et al., 2021; Aman-Ullah et al., 2022). However, the growth of digital work, which evolves from traditional telework to flexible off-site work models, has blurred the line between career and private duties (Duan et al., 2022; Ruiner & Klumpp, 2022). To

address this issue, technology affordance theory offers a meaningful framework to explore how digital tools influence work-life balance, especially through five core affordances, which are coordination, communication, knowledge sharing, decision-making, and access to resources (Azizi et al., 2022; Shao et al., 2020). In this study, these five affordances are conceptualised as independent variables, while work-life balance is the dependent variable and user experiences, on the other hand, act as the moderating variable.

Technology Affordance for Coordination

Coordination affordance refers to how digital technologies assist individuals in organising tasks and collaborating more effectively, especially in the context of working from home (Bobsin et al., 2018; Duan et al., 2022). In education settings, lecturers adapt their pedagogical approaches by incorporating digital tools that support the coordination of academic responsibilities and the sharing of knowledge (Menon & Suresh, 2022). Coordination is important for certain tasks that require a high degree of interdependence among colleagues. Digital tools can help reduce challenges associated with distributed teams, such as diminished trust, limited knowledge exchange, and increased interpersonal conflict (Jamal et al., 2021). A number of studies have proven that digital technologies can enhance work coordination by fostering better flexibility, mobility, and the sharing of knowledge, which in turn can influence work-life balance in a positive manner (Chen et al., 2019; Deng et al., 2023). By making it easier for employees to balance professional obligations with personal duties, digital tools are capable of supporting better work-life balance (Duan et al., 2022). Accordingly, the first hypothesis (**H1**) of this study is proposed as follows:

H1: The availability and use of technology affordance for coordination in the work environment may have a positive and significant association with individuals' perceptions of work-life balance.

Technology Affordance for Communication

Communication affordance refers to how digital technologies can assist in enabling the exchange of information and interpersonal interaction, which can consequently strengthen communication across both personal and professional domains (Duan et al., 2022). In the educational context, these technologies improve engagement between teachers and students as well as support engaging learning environments (Menon & Suresh, 2022). In the work environment, they facilitate real-time connectivity and support the process of decision-making among employees (Panda & Sahoo, 2021). Moreover, with the growing availability and use of mobile devices and high-speed internet, workers can balance their work and personal responsibilities with improved flexibility, but these tools may diminish the boundaries between work and personal life (Alwis et al., 2022). When used effectively, communication technologies can fix and strengthen team collaboration and employee satisfaction, which in turn may contribute to improved work-life balance (Shipman et al., 2023). Based on these insights, the second hypothesis (**H2**) of this study is proposed as follows:

H2: The availability and use of technology affordance for communication in the work environment may have a positive and significant association with individuals' perceptions of work-life balance.

Technology Affordance for Knowledge Sharing

Knowledge sharing involves the exchange of task-related information and proficiency to help individuals solve issues, generate ideas, as well as work together more effectively (Duan et al., 2022). Digital technologies, especially social media and online platforms, are capable of facilitating knowledge sharing by connecting people and organisations, promoting creativity, and improving collaboration among employees (Bobsin et al., 2018; Prata-Linhares et al., 2023). The shift to digital platforms during the COVID-19 pandemic emphasised the essential role of these technologies in transforming how knowledge is shared in the education sector and beyond (Khaleghi et al., 2022). Digital tools can help enhance the speed and effectiveness of the transfer of knowledge and subsequently assist organisations to improve the quality of work among their employees (Deng et al., 2023). Additionally, these technologies support autonomy and collaboration, which can help improve work-life balance by enabling individuals to coordinate their professional and personal responsibilities more effectively (Duan et al., 2022; Kalra & Baral, 2020). Drawing on the aforementioned findings, the third hypothesis (**H3**) of this study is proposed as follows:

H3: The availability and use of technology affordance for knowledge sharing in the work environment may have a positive and significant association with individuals' perceptions of work-life balance.

Technology Affordance for Decision Making

Decision-making affordance places emphasis on the role of digital tools in supporting informed decision-

making by providing users with the right tools and information to analyse data, evaluate alternatives, and make reasonable decisions (Duan et al., 2022). In higher education, technologies like social media and remote tools (e.g., Zoom, Webex, Microsoft Teams) play an important role in decision-making processes, especially during the shift to digital operations (Marcinkevicius & Vilkas, 2023). These tools allow for hierarchical decision-making, assist in collaborative input, and streamline the dissemination of information (Freeman et al., 2021). Meanwhile, in business settings, digital applications such as issue management systems and business intelligence platforms help businesses enhance decision-making by integrating data analysis and supporting data-driven practices, thereby reducing reliance on intuition solely (Wang et al., 2020). Hence, the fourth hypothesis (**H4**) is proposed as follows:

H4: The availability and use of technology affordance for decision-making in the work environment may have a positive and significant association with individuals' perceptions of work-life balance.

Technology Affordance for Accessing the Resources

Affordable technology makes it convenient for organisations to get access to both internal and external resources, which enables them to reach broader audiences and helps achieve their goals (Bobsin et al., 2018). In the education sector, technological developments provide students and lecturers more opportunities to use learning materials beyond their local contexts (Menon & Suresh, 2022). However, the effectiveness of these technologies likely depends heavily on their appropriate utilisation, whereby misuse and underuse of the technologies may hinder their intended benefits (Jain & Jain, 2022). Technology also serves an important role in enabling remote work by providing access to files, facilitating communication, and managing resources (Jamal et al., 2021). Studies indicate that access to digital resources can improve productivity, performance, and job satisfaction, but excessive reliance on such tools may also lead to fragmentation of work and increased stress (Cochis et al., 2020). When applied effectively, digital tools may provide greater flexibility, accelerate access to resources, and promote a healthier work-life balance. Accordingly, the fifth hypothesis (**H5**) of this study is formulated as follows:

H5: The availability and use of technology affordance for access to resources in the work environment may have a positive and significant association with individuals' perceptions of work-life balance.

The Moderating Effect of User Experience Level

User experience serves as an important moderating factor in the relationship linking technology affordances and perceived satisfaction, as prior experience tends to make individuals more responsive to system functionality and service quality (Shao et al., 2020). Zhao and Wagner (2023) argued that cognitive responses to technology are shaped by user experience. This finding aligns with the results by Prata-Linhares et al. (2023), who demonstrated that hands-on and meaningful learning experiences can help enhance individual growth. Furthermore, the adaptation level theory further suggests that as individuals gain experience, their reactions to technology tend to evolve (Zhao & Wagner, 2023). Previous studies also demonstrate that user experience strongly influences how individuals perceive the quality and usefulness of technological systems (Shao et al., 2020). Consequently, this evidence implies that the user experience factor is critical in determining how the identified technology affordances affect work-life balance. This leads to the formulation of the sixth hypothesis (**H6**) of this study:

H6a: User experience is positively associated with technology affordance for coordination in supporting work-life balance.

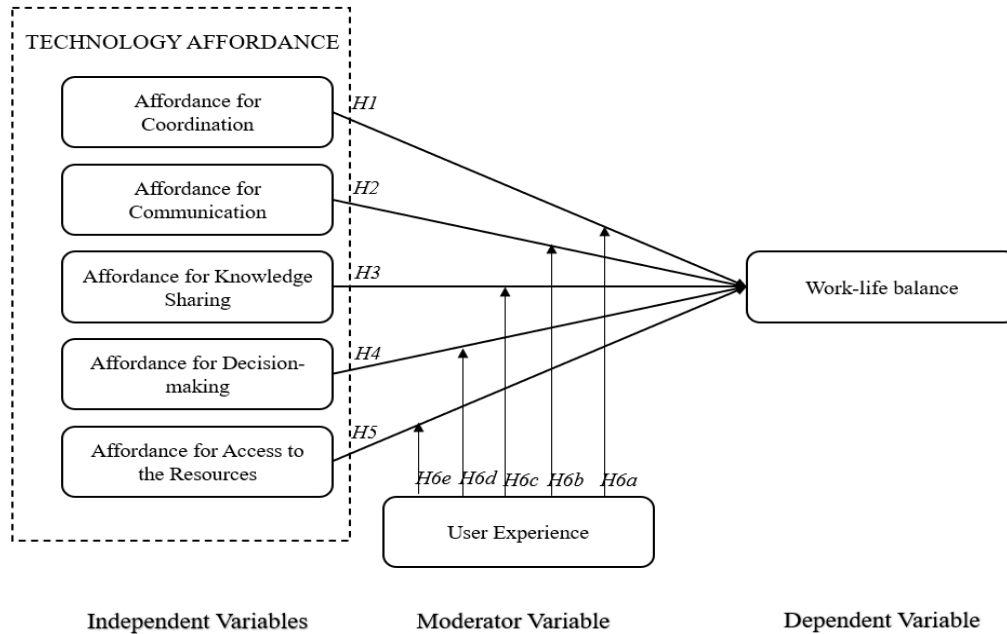
H6b: User experience is positively associated with technology affordance for communication in supporting work-life balance.

H6c: User experience is positively associated with technology affordance for knowledge sharing in supporting work-life balance.

H6d: User experience is positively associated with technology affordance for decision-making in supporting work-life balance.

H6e: User experience is positively associated with technology affordance for accessing resources in supporting work-life balance.

Figure 1: The Research Framework



3. Research Methodology

This study used a quantitative survey approach to investigate how digital work affects work-life balance among lecturers in private universities and colleges in the Klang Valley. This method was chosen as it facilitated the collection of empirical data to confirm the relationships identified in the literature. The study focused on lecturers from private universities and colleges, with an estimated population of 10,500 individuals. A technique named purposive sampling was employed to identify and select respondents who fulfilled specific inclusion criteria. To ensure statistical adequacy, the G*Power software was utilised to determine the minimum required sample size of 118 respondents. The individual lecturer served as the unit of analysis, which aligns with the study's objective of understanding personal experiences of work-life balance.

Data collection was carried out using a structured questionnaire, which is divided into four sections that cover demographics, technology affordances, work-life balance, and user experience. A five-point Likert scale was employed to measure all responses. The Statistical Package for the Social Sciences Version 26 (SPSS 26) was used to analyse the related data through multiple regression techniques, which align with the study's purpose of exploring the relationships between variables. The hypotheses were tested through multiple regression analysis. Table 1 describes a summary of the analysis of data corresponding to the study's research questions.

Table 1: Summary of Data Analysis

Research Question	Section from questionnaire	Data Analysis
RQ1: What is the perceived implication of technology affordance for coordination on work-life balance?	Section B1: Technology Affordance for Coordination Section C: Work-Life Balance	Descriptive Analysis Pearson Correlation Analysis Multiple Regression Analysis
RQ2: What is the perceived implication of technology affordance for communication on work-life balance?	Section B2: Technology Affordance for Communication Section C: Work-Life Balance	Descriptive Analysis Pearson Correlation Analysis Multiple Regression Analysis
RQ3: What is the perceived implication of technology affordance for knowledge sharing on work-life balance?	Section B3: Technology Affordance for Knowledge Sharing Section C: Work-Life Balance	Descriptive Analysis Pearson Correlation Analysis Multiple Regression Analysis

RQ4: What is the perceived implication of technology affordance for decision-making on work-life balance?	Section B4: Technology Affordance for Decision-Making Section C: Work-Life Balance	Descriptive Analysis Pearson Correlation Analysis Multiple Regression Analysis
RQ5: What is the perceived implication of technology affordance for access to resources on work-life balance?	Section B5: Technology Affordance for Access to Resources Section C: Work-Life Balance	Descriptive Analysis Pearson Correlation Analysis Multiple Regression Analysis
RQ6: How does user experience moderate the relationships between the five technology affordances and work-life balance?	Section B: Technology Affordance Section C: Work-Life Balance Section D: User-Experiences	Multiple Regression (Hierarchical) Interaction Analysis

Pre-test

A pre-test has been conducted to assess the clarity and reliability of the survey instrument before being distributed. The pre-testing process involved two academic experts and three industry professionals who reviewed the instrument for comprehensibility and relevance. Content and face validity were established through evaluations by five subject matter experts, while reliability was assessed by employing Cronbach's alpha.

4. Results

The study targeted 118 lecturers from non-public universities and colleges in the Klang Valley, with the questionnaire distributed through email, messaging applications, and social media platforms between 9 October and 22 December 2024, which yielded 155 responses. To ensure data accuracy, a filtering process was employed to exclude nine irrelevant responses, followed by data cleaning to address issues, such as missing values, straight-lining, and outliers. No missing data were identified; however, two responses exhibiting straight-lining and two statistical outliers were removed. The final sample size comprised 142 valid responses, exceeding the minimum required sample size of 118.

Means and Standard Deviations after Factor Analysis

Table 2 illustrates both means and standard deviations for all variables. The independent variables, which represent the technology affordance, include coordination, communication, sharing of knowledge, decision-making, and access to resources. Work-life balance acts as the determining dependent variable.

Table 2: The Means and Standard Deviations

No.	Variables	N	Mean	Standard Deviation
Independent Variables				
1	Coordination	142	4.32	0.93
2	Communication	142	3.93	0.61
3	Knowledge Sharing	142	4.18	0.52
4	Decision-Making	142	4.27	0.55
5	Access to Resources	142	4.21	0.59
Dependent Variable				
1	Work-Life Balance	142	3.81	0.93

As seen in Table 2, the descriptive analysis showed that respondents reported a moderate level of work-life balance (mean = 3.82, SD = 0.93). Among the five technology affordances, coordination obtained the leading mean score (mean = 4.32, SD = 0.61), followed by decision-making (mean = 4.27, SD = 0.59), access to resources (mean = 4.21, SD = 0.63), and knowledge sharing (mean = 4.18, SD = 0.55). Communication was rated the lowest (mean = 4.18, SD = 0.52), despite receiving a positive rating. These results indicate that respondents generally perceive a substantial level of technology affordances in their work environments, with coordination being the most valued dimension.

Normality test

Table 3 summarises the factor analysis results, including the normality score for each variable. The results show that all variables are normally distributed, with skewness values falling between -2 to +2 and kurtosis values ranging between -7 and +7.

Table 3: Normality assessment of variables following Factor Analysis

No.	Variables	Skewness	Kurtosis
Independent Variables			
1	Coordination	-1.248	4.638
2	Communication	-0.1	0.376
3	Knowledge Sharing	-0.232	-0.268
4	Decision-Making	-0.774	2.071
5	Access to Resources	-0.737	1.291
Dependent Variable			
1	Work-Life Balance	-0.675	-0.527
Moderator Variable			
1	User Experiences	-1.296	5.116
	Standard Error	0.203	0.404

Reliability after Factor Analysis

Reliability refers to the consistency of observations, either across different observers or over repeated instances. In this study, reliability was evaluated with Cronbach's alpha, which measures how consistently items within a scale are related to one another. A higher alpha score indicates stronger reliability: above 0.9 is excellent, 0.8 to 0.9 very good, 0.7 to 0.8 good, 0.6 to 0.7 moderate, and below 0.6 poor.

Table 4: Reliability Analysis following Factor Analysis (n=142)

No.	Variables	Number of Items	Cronbach's Alpha from the actual study (n=142)
Independent Variables			
1	Coordination	4	0.887
2	Communication	6	0.658
3	Knowledge Sharing	5	0.739
4	Decision-Making	4	0.857
5	Access to Resources	4	0.838
Dependent Variable			
1	Work-Life Balance	2	0.799
Moderator Variable			
1	User Experience	4	0.883

The reliability analysis using Cronbach's alpha illustrated that most dimensions exhibited good to very good internal consistency. The affordance for coordination ($\alpha = .887$), decision-making ($\alpha = .857$), access to resources ($\alpha = .838$), and user experience ($\alpha = .883$) exhibited very good reliability. Meanwhile, knowledge sharing ($\alpha = .739$) and work-life balance ($\alpha = .799$) exhibited good reliability, with certain items removed to improve consistency. Communication ($\alpha = .658$) showed moderate reliability. Overall, the results demonstrated acceptable to excellent reliability levels.

Pearson Correlation Analysis

Table 5 illustrates the Pearson correlation analysis results between the independent variables (coordination, communication, knowledge sharing, decision-making, and resource access) and the dependent variable (work-life balance). This analysis was carried out to explore the magnitude and direction of the relationships between the variables. The findings shed light on how these affordances affect the work-life balance of lecturers in private universities and colleges.

Table 5: Pearson Correlation Analysis

	Correlations					
	WLB	CD	CM	KS	DM	AR
Work-life Balance (WLB)	1					
Coordination (CD)	.456**	1				
Communication (CM)	.430**	.593**	1			
Knowledge Sharing (KS)	.438**	.574**	.625**	1		
Decision-Making (DM)	.386**	.711**	.653**	.608**	1	
Access to Resources (AR)	.480**	.599**	.525**	.490**	.701**	1

** . Correlation is significant at the 0.01 level (2-tailed).

Multiple Regression Analysis

As shown in Table 6, the multiple regression analysis illustrated the link between work-life balance and the five identified technology affordances.

Table 6: Multiple Regression Analysis

Independent Variables	Standard Coefficients Beta	t	Sig.
Coordination	0.208	1.946	0.054
Communication	0.15	1.466	0.145
Knowledge Sharing	0.188	1.919	0.057
Decision-Making	-0.203	-1.637	0.104
Access to Resources	0.327	3.214	0.002
R Square	0.32		
F	12.798		
Sign. of F Value	<0.01		
df	5		
	136		
Durbin Watson	2.049		

The multiple regression analysis illustrated in Table 6 showed that the model accounted for 32.0% of the variance in work-life balance ($R^2 = .320$), which reflects a moderate level of explanatory power. The model was statistically significant, as shown by the F-statistic ($F = 12.798$, $p < 0.01$), which indicates that the independent variables collectively contribute meaningfully to variations in work-life balance among respondents. Furthermore, the Durbin-Watson statistic (2.049) showed that the residuals did not exhibit serious autocorrelation.

Among the five technology affordance variables, access to resources ($\beta = .327$, $t = 3.214$, $p = .002$) was identified as the strongest and most significant predictor of work-life balance. This result highlights the critical role of digital tools that facilitate timely and efficient access to essential resources in promoting a healthier work-life balance for lecturers engaged in digital work environments. Coordination ($\beta = .208$, $t = 1.946$, $p = .054$) showed a marginally significant positive association with work-life balance. This suggests that digital tools supporting task coordination may contribute positively to work-life balance, although the result is slightly above the conventional significance threshold.

Similarly, knowledge sharing ($\beta = .188$, $t = 1.919$, $p = .057$) also displayed a marginally significant positive effect, implying that platforms enabling effective knowledge dissemination may ease workload pressures and support better work-life harmony, despite the p-value exceeding the typical cut-off for significance. On the other hand, technology affordance for communication ($\beta = .150$, $t = 1.466$, $p = .145$) and decision-making ($\beta = -.203$, $t = -1.637$, $p = .104$) were not statistically significant. The negative beta value for decision-making affordance suggests a potential inverse relationship with work-life balance, implying that certain decision-making technologies may contribute to increased work complexity. However, this result warrants further investigation.

Hierarchical Regression Analysis

This study investigates the relationship between technology affordances and work-life balance, with particular

attention to user experience as the moderating variable. Table 7 illustrates the analysis of the hierarchical linear regression model to answer Research Question 6, which examines how user experience affects the relationship between all key technology affordances and work-life balance.

Table 7: Hierarchical Regression Analysis

Model	Predictor Variables	R ²	ΔR ²	F Change	β Coefficients	t-values	p-values
6	Coordination	.323	0.003	0.123	0.219	1.833	0.069
	Communication				0.139	1.247	0.215
	Knowledge Sharing				0.193	1.737	0.085
	Decision-Making				-0.194	-1.474	0.143
	Access to Resources				0.329	3.013	0.003
	User Experiences X Coordination				0.224	0.736	0.463
	User Experiences X Communication				-0.2	-0.099	0.921
	User Experiences X Knowledge Sharing				0.019	0.237	0.813
	User Experiences X Decision-Making				-0.142	-0.41	0.683
	User Experiences X Access to Resources				-0.044	-0.172	0.864

The study analysed user experience variables and their interaction with technology affordances (coordination, communication, knowledge sharing, decision-making, and access to resources) to predict work-life balance. The results showed no significant increase in the explained variance, suggesting that 32.3% of the variation in perceived work-life balance is explained by the combined effects of technology affordances and user experience interaction terms. Coordination affordance showed a marginally significant effect, while knowledge sharing affordance exhibited a borderline significance. Access to resources was the strongest significant predictor, while communication was non-significant. User experience did not significantly moderate any of the relationships between individual technology affordances and work-life balance. These findings point out that while technology features, like collaboration, knowledge sharing, and access to resources, are influential, user experience does not amplify their effects on work-life balance as hypothesized. This contradicts the proposed hypothesis and points to the need for further investigation into how user experience interacts with digital tools in academic settings. Further research is required to understand the role of user experience in this particular context.

Discussion

The Pearson correlation analysis, as illustrated in Table 5, revealed several significant positive associations between technology affordances and work-life balance, with all correlations statistically significant at the 0.01 level ($p < .001$). Among the five technology affordances examined, access to resources demonstrated the strongest correlation with work-life balance ($r = .480$), indicating a moderate positive relationship. This finding underscores the critical role of technological access to essential resources in supporting lecturers' ability to manage both their professional and personal responsibilities.

Technology affordance for coordination also exhibited a moderate positive correlation ($r = .456$), suggesting that improved technological coordination mechanisms are associated with enhanced work-life balance. Similarly, knowledge sharing ($r = .438$), communication ($r = .430$), and decision-making ($r = .386$) affordances displayed moderate positive correlations with work-life balance. Although slightly weaker, these relationships indicate that digital tools facilitating information exchange, communication, and decision-making contribute positively to maintaining a healthy work-life equilibrium.

In contrast, the multiple regression analysis, as shown in Table 6, refined these findings by identifying which technology affordances significantly predicted work-life balance when the effects of other variables were controlled. The regression model explained 32.0% of the variance in work-life balance ($R^2 = .320$), and was statistically significant ($F = 12.798$, $p < .01$), suggesting a meaningful collective impact of the independent variables. Notably, access to resources ($\beta = .327$, $p = .002$) emerged as the most significant predictor,

highlighting the importance of resource availability in digital work environments among lecturers. Coordination ($\beta = .208$, $p = .054$) and knowledge sharing ($\beta = .188$, $p = .057$) exhibited marginal significance, indicating a possible positive effect that warrants further exploration. Meanwhile, communication ($\beta = .150$, $p = .145$) and decision-making ($\beta = -.203$, $p = .104$) were not statistically significant predictors, with the latter even suggesting a potential negative association.

These findings align with Duan et al. (2023), who reported that coordination and knowledge sharing affordances were significantly related to improved work-life balance and job performance, while communication and decision-making affordances showed no significant effects in their regression model. Similarly, Gupta et al. (2024) emphasised that streamlined and coordinated access to digital resources, particularly for administrative tasks, plays an important role in reducing workload and supporting work-life balance among lecturers. This shows how important resource access is as an important technological affordance in academic settings.

Additionally, Fadhil et al. (2023) highlighted that the lack of defined boundaries when utilising digital tools can affect lecturers in a negative manner, especially women, by allowing professional duties to interfere with their personal time. This may explain why some affordances, like communication and decision-making, demonstrated non-significant or marginal effects in the regression results. Similarly, Alhosani et al. (2023) added that although technology affordances can create new opportunities for teaching and flexibility, their effectiveness may likely depend on organisational support and infrastructure availability. These contextual factors likely shape the strength of each affordance's contribution to work-life balance. In addition, Gorrell (2023) emphasised that the rapid digital transformation in higher education has led to growing technostress among academic staff. The increased cognitive and emotional demands may undermine the anticipated benefits of affordances like communication and decision-making, which could explain their limited predictive value.

Overall, the analyses illustrate that all five technology affordances are positively connected to work-life balance when looking at the correlational level. However, only access to resources demonstrated a strong predictive effect in the regression model. These findings suggest that although various technological features are able to support work-life balance, access to essential digital resources is very impactful and meaningful. The findings also imply that the impact of coordination, communication, and decision-making tools may depend more heavily on contexts. This warrants the need for further research to understand the organisational and individual factors that may mediate or moderate these relationships. In practice, higher education institutions should prioritise the adoption of technologies that support both access to resources and knowledge-sharing processes to promote a healthier work-life balance for academic staff.

Summary of Hypotheses

The hypotheses in this study have been designed to explore the relationship between the availability and utilisation of the aforementioned technology affordances in the workplace and work-life balance perceptions among individuals. The analysis used both Pearson's correlation and multiple regression methods to figure out the significance of these relationships. A summary of the hypotheses is provided in Table 8.

Table 8: Summary of Hypotheses

H	Hypotheses	Result
H1	The availability and use of technology affordance for coordination in the work environment may have a positive and significant association with individuals' perceptions of work-life balance.	Accepted
H2	The availability and use of technology affordance for communication in the work environment may have a positive and significant association with individuals' perceptions of work-life balance.	Rejected
H3	The availability and use of technology affordance for knowledge sharing in the work environment may have a positive and significant association with individuals' perceptions of work-life balance.	Accepted
H4	The availability and use of technology affordance for decision-making in the work environment may have a positive and significant association with individuals' perceptions of work-life balance.	Rejected

H5	The availability and use of technology affordance for access to resources in the work environment may have a positive and significant association with individuals' perceptions of work-life balance.	Accepted
H6 _a	User experience is positively associated with technology affordance for coordination in supporting work-life balance.	Rejected
H6 _b	User experience is positively associated with technology affordance for communication in supporting work-life balance.	Rejected
H6 _c	User experience is positively associated with technology affordance for knowledge sharing in supporting work-life balance.	Rejected
H6 _d	User experience is positively associated with technology affordance for decision-making in supporting work-life balance.	Rejected
H6 _e	User experience is positively associated with technology affordance for accessing resources in supporting work-life balance.	Rejected

5. Managerial Implications and Recommendations

This study, which aimed at exploring the association between technology affordances and work-life balance has generated several directions for future studies. The analysis revealed that user experience did not have a significant effect on the association between technology affordances and work-life balance. Future research should therefore examine other possible moderators and mediators, including organisational culture, workload demands, and personal differences, to gain a clearer understanding of the factors that shape this relationship.

Moreover, it is also important to explore the potential negative impacts of digital work environments on academic staff. Variables, such as technostress and boundary blurring, may interact with technology affordances in ways that affect work-life balance. Looking at these negative effects may offer a broader picture of how digital tools impact lecturers' overall well-being.

The current study focused exclusively on lecturers from private higher education institutions within the Klang Valley region of Malaysia. Future research should expand the scope to include different professional sectors and regions to explore whether the findings hold across various occupational, cultural, economic, and institutional contexts. Comparative studies between public and private higher education institutions may also reveal distinct patterns in how technology affordances affect work-life balance. Future research that addresses these gaps can help strengthen both theory and practice in using technology affordances to promote a healthier and balanced digital work environment.

Conclusion

This study investigates how digital work influences the work-life balance of lecturers across private universities and colleges in the Klang Valley region of Malaysia. It focuses on five key technology affordances: coordination, communication, knowledge sharing, decision-making, and access to resources. The results show that access to resources is the most significant predictor of work-life balance, demonstrating a strong positive relationship. Coordination and knowledge sharing exhibit marginally significant positive effects, while communication and decision-making do not show a statistically strong influence on work-life balance. Furthermore, this study reveals that user experience did not exhibit a moderating role in the relationships between these affordances and work-life balance.

The findings contribute to the technology affordances framework by identifying the most critical technology affordances influencing work-life balance in higher education settings. They also challenge assumptions about the role of user experience and draw attention to the organisational and contextual factors that shape how digital tools are utilised. On a practical level, the study offers clear guidance for higher education institutions, which are to prioritise access to resources, design user-friendly tools, offer sufficient training and support, and cultivate a supportive organisational culture to promote a healthier work-life balance. Despite its contributions, the study is not without limitations. Future research should put more emphasis on examining other moderating and mediating factors, such as technostress, as well as exploring different professional contexts, regional settings, and the interrelationships among affordances. Overall, this study reinforces the important role of

technology affordances in influencing work-life balance and offers significant insights for researchers and practitioners in the field of digital work and organisational well-being.

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